Preventing Heat-Related Illnesses Stats and Facts



FACTS

1. Heat stroke is the most serious heat-related illness. It occurs when the body can no longer control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause permanent disability or death if the person does not receive emergency treatment.
2. Heat exhaustion is the body's response to an excessive loss of water and salt, usually through excessive sweating.
3. Rhabdomyolysis (rhabdo) is a medical condition associated with heat stress and prolonged physical exertion. Rhabdo causes the rapid breakdown, rupture, and death of muscles. When muscle tissue dies, electrolytes and large proteins are released into the bloodstream. This can cause irregular heart rhythms, seizures, and damage to the kidneys.
4. Heat syncope is a fainting (syncope) episode or dizziness that usually occurs when standing for too long or suddenly standing up after sitting or lying. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.
5. Heat cramps usually affect workers who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture levels. Low salt levels in muscles cause painful cramps. Heat cramps may also be a symptom of heat exhaustion.
6. Heat rash is a skin irritation caused by excessive sweating during hot, humid weather.

STATS

- In 2019, exposure to heat led to 43 work-related deaths and 2,410 injuries and illnesses, according to the U.S. Bureau of Labor Statistics.
- OSHA states that 50 to 70 % of most outdoor fatalities occur in the first few days of working in warm or hot environments because the body has not sufficiently built heat tolerance.
- For employees new to working in heat, increase exposure time in hot conditions over a 7-to-14-day period based on environmental and individual

risk factors. An employer should never increase a new employee’s exposure to heat by more than 20 % per day.

- Heat was a contributing factor in 1,577 U.S. deaths in 2021, according to provisional data. That’s a 56% jump from 1,012 in 2018.
- Heat-related deaths are most common in Nevada and Arizona. Between 2018 and 2021, 571 people in Nevada and 1,298 people in Arizona died where heat was among the causes of death. That’s 4.54 and 4.46 deaths per 100,000 residents, respectively, over that period – far higher than the U.S. average over the same period of 0.35 per 100,000 residents.